

IN THE CLAIMS:

This complete listing of the pending claims replaces all previous listings of the claims.

1. (currently amended) A transport pipe for high viscosity materials, ~~in particular for concrete~~, comprising:
 - an inner pipe (10) made of an abrasion-resistant plastic,
 - at least one joint element (12) materially joined to an external end of the inner pipe (10), which includes a radially extending collar (16) and a ring sleeve (18) concentric to the inner pipe (10) extending axially from one side thereof,
 - a reinforcing jacket (14) enclosing at least the internal pipe and connected thereto and to the joint element (12),
 - wherein the radially projecting collar (16) of the joint element (12) is defined by a ring shaped end face (20) and by a thereto joined ring step (22) extending radially towards the inside of the pipe and recessed axially from the ring-shaped end face (22), and
 - wherein the plastic material of the inner pipe (10) engages from the inside of the pipe in the ring step (22),
 - wherein the ring sleeve (18) exhibits a wave shape running in the axial direction, and
 - wherein sequential wave peaks (38) of the ring sleeve (18) exhibit a decreasing radial height going towards the free end of the ring sleeve (18).
2. (currently amended) The transport pipe according to Claim 1, wherein the plastic material of the inner pipe (10) fills the free area (24) bordered by the ring step (22) of the collar and thereby forms an on the end face (20) of the collar (16), radially inward, an end face part (26) preferably aligned or joining flush.

3. (previously presented) The transport pipe according to Claim 1, wherein extending from the recessed border surface of the ring step (22) a diagonal or curved transition surface (28) extends in the axial direction to the inner radius of the inside of the cylindrical ring sleeve (18).
4. (previously presented) The transport pipe according to Claim 1, wherein the inner surface of the cylindrical inner pipe (10) exhibits an opening which is slanted or curved diverging towards the end face (20, 26) of the collar (16).
5. (withdrawn, currently amended) The transport pipe according to Claim 1 A transport pipe for high viscosity materials, comprising:
an inner pipe (10) made of an abrasion-resistant plastic,
at least one joint element (12) materially joined to an external end of the inner pipe (10), which includes a radially extending collar (16) and a ring sleeve (18) concentric to the inner pipe (10) extending axially from one side thereof,
a reinforcing jacket (14) enclosing at least the internal pipe and connected thereto and to the joint element (12),
wherein the radially projecting collar (16) of the joint element (12) is defined by a ring shaped end face (20) and by a thereto joined ring step (22) extending radially towards the inside of the pipe and recessed axially from the ring-shaped end face (22), and
wherein the plastic material of the inner pipe (10) engages from the inside of the pipe in the ring step (22), and
wherein the reinforcing jacket (14) is a steel pipe, on the ends of which the ring sleeve (18) of the, ~~preferably truncated;~~ joint element (12) is welded.
6. (withdrawn) The transport pipe according to Claim 5, wherein the inner pipe (10) is a wear resistant inner coating for the steel pipe (14) and the attached joint element (12).

7. (currently amended) The transport pipe according to Claim 1, wherein the ring sleeve (18) of the joint element exhibits an outer surface (34) with outer diameter varying in the axial direction, and that the reinforcing jacket (14) is formed by a fiber structure impregnated in a plastic matrix and tightly cohesively wound externally on the inner pipe (10) and the ring sleeve (18) of the joint element (12), which reinforcing jacket (14) is connected with the outer surface (34) of the ring sleeve (18) form-fittingly and/or in certain cases materially joined.
8. (currently amended) A transport pipe for high viscosity materials, in particular for concrete, comprising:
 - an inner pipe (10) made of an abrasion-resistant plastic,
 - at least one joint element (12) materially joined to an external end of the inner pipe (10), which includes a radially extending collar (16) and a ring sleeve concentric to the inner pipe (10) extending axially from one side thereof, as well as
 - a reinforcing jacket (14) which envelops at least the internal pipe and is connected thereto and to the joint element (12),
 - wherein the ring sleeve (18) of the joint element exhibits an outer surface (34) with outer diameter varying in the axial direction, and that
 - wherein the reinforcing jacket (14) is formed by a fiber structure impregnated in a plastic matrix and tightly cohesively wound externally on the inner pipe (10) and the ring sleeve (18) of the joint element (12), which reinforcing jacket (14) is connected with the outer surface (34) of the ring sleeve (18) form-fittingly and/or in certain cases materially joined,
wherein the ring sleeve (18) exhibits a wave shape running in the axial direction,
and
wherein sequential wave peaks (38) of the ring sleeve (18) exhibit a decreasing radial height going towards the free end of the ring sleeve (18).

9. (previously presented) The transport pipe according to Claim 7, wherein the fiber structure is fiber cable or thread, fiber tape, fabric tape or mat.
10. (previously presented) The transport pipe according to Claim 7, wherein the fiber structure contains fiber material from the group consisting of carbon fiber, glass fiber, aramide fiber and/or polyester fiber.
11. (previously presented) The transport pipe according to Claim 7, wherein the fiber structure includes fiber layers laid axially and/or radially.
12. (canceled)
13. (previously presented) The transport pipe according to Claim 7, wherein the ring sleeve (18) exhibits a shape which in the axial direction is trapezoid shaped, step shaped, grooved or knurled.
14. (previously presented) The transport pipe according to Claim 7, wherein the joint element (12) is provided with pins, about which the fiber structure is laid forming loops.
15. (previously presented) The transport pipe according to Claim 7, wherein the reinforcing jacket (14) and the joint element (12) are bolted together.
16. (previously presented) The transport pipe according to Claim 7, wherein on the two ends of the inner pipe (10) respectively one joint element (12) is provided, the joint element (12) including a ring sleeve (18) which on the outer surface is waved shaped.
17. (currently amended) The transport pipe according to Claim 7, wherein only on one, preferably the entry side, end of the inner pipe (10) a joint element (12) with ring sleeve (18) waved on the outside is provided, while on the other, preferably the exit, end a joint element (44) with external flat ring sleeve (46) is adhered.

18. (previously presented) The transport pipe according to Claim 7, wherein the ring sleeve (18) of the joint element (12) becomes tapered on its free end opposite to the collar (16).
19. (previously presented) The transport pipe according to Claim 7, wherein the wave contour of the outer surface of the ring sleeve (18), towards its free end, becomes more shallow.
20. (previously presented) The transport pipe according to Claim 7, wherein the wave contour on the outer surface exhibits, immediately adjacent the collar (16), an axially joining, sharp edged radial rebounding wave valley (40).
21. (currently amended) The transport pipe according to Claim 1 [[7]], wherein between the wave valley (40) closest to the collar and the free end of the ring sleeve (18) at least two wave peaks (38) appear separated from each other by at least one further wave valley (42).
22. (canceled)
23. (previously presented) The transport pipe according to Claim 7, wherein the inner pipe (10) is comprised of wear resistant polyurethane.
24. (currently amended) The transport pipe according to Claim 7, wherein the inner pipe (10) is cast on to the joint element (12), ~~preferably via an adhesion promoter or primer applied over the joint element.~~
25. (previously presented) The transport pipe according to Claim 7, wherein the fiber structure embedded in the plastic matrix is materially joined with the inner pipe (10) with the formation of a closed reinforcing jacket (14).

26. (previously presented) The transport pipe according to Claim 7, wherein for the plastic matrix a plastic material is selected from the group consisting of epoxy resin, polyester resin, vinyl resin, and thermal plastic resin.
27. (currently amended) The transport pipe according to Claim 1, wherein the joint element (12) is metal, ~~preferably steel~~.
28. (currently amended) The transport pipe according to Claim 7, wherein the joint element (12) is comprised of a plastic molded part reinforced with fiber, ~~preferably injection molded or produced in a press mold~~.

29-37. (canceled)

38. (withdrawn, currently amended) A method for transporting concrete, comprising transporting concrete through the mobile or stationary concrete pipe pump of Claim 1.
39. (withdrawn, currently amended) A method for transporting concrete, comprising transporting concrete through the concrete distribution boom in mobile or stationary concrete pipes pumps of Claim 1.